

**UNITED STATES DISTRICT COURT  
SOUTHERN DISTRICT OF NEW YORK**

CARNEGIE INSTITUTION OF WASHINGTON,

M7D CORPORATION,

*Plaintiffs,*

v.

PURE GROWN DIAMONDS, INC.,

IIA TECHNOLOGIES PTE. LTD D/B/A  
IIA TECHNOLOGIES,

*Defendants.*

Civil Action No. 1:20-cv-00189-JSR

**MEMORANDUM OF LAW IN SUPPORT OF PLAINTIFFS' MOTION TO DISMISS**

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'078 Patent	U.S. Patent No. 6,858,078
RE'189 Patent	U.S. Patent No. RE41,189
'610 Patent	U.S. Patent No. 6,811,610
'171 Application	U.S. Patent Application No. 10/889,171
'266 Application	U.S. Patent Application No. 10/161,266
'529 Application	U.S. Reissue Patent Application No. 12/362,529
2AT	IIA Technologies Pte. Ltd d/b/a IIA Technologies
Carnegie	Carnegie Institution of Washington
Defendants	Defendants Pure Grown Diamonds, Inc. and IIA Technologies Pte. Ltd d/b/a IIA Technologies
MPEP (2008)	Manual of Patent Examining Procedure, Eighth Edition, Revision 7 (July 2008)
PGD	Defendants Pure Grown Diamonds, Inc. and IIA Technologies Pte. Ltd d/b/a IIA Technologies
Plaintiffs	Plaintiffs Carnegie Institution of Washington and M7D Corporation
PTO	U.S. Patent and Trademark Office
Rule	Federal Rule of Civil Procedure

## I. INTRODUCTION

After the Court denied their motion to dismiss on May 8, 2020, Defendants filed Answers, Defenses, and Counterclaims with bold claims of inequitable conduct, patent misuse, and ensuing invalidity. The claims, however, are grounded in threadbare allegations of deceptive intent, “intentional concealment,” and material omissions that do not flow from pleaded facts. Instead, the predicate facts Defendants allege to support their fraud-like accusations are contradicted by undisputed facts or irrefutable public events during patent prosecution. For example, Defendants spin a tale of deceptive intent by the original applicants of the RE’189 Patent premised on their choice to list themselves as joint inventors and file supporting oaths and declarations. From these facts, Defendants perform inferential acrobatics to allege the applicants “intentionally concealed” the inventive contribution of Carnegie scientists and held themselves out as “sole” inventors. But these charges are inconsistent with the prosecution record and any inference of deceptive intent would be unreasonable. The applicants merely indicated they were joint inventors, and, in fact, one (Wei Li) remains a named inventor on the patent, and the second (Robert Frushour) willingly relinquished his interest both in his capacity as an inventor and as CEO of a subsequent assignee. Defendants never allege that Li and Frushour were aware that Carnegie scientists contributed to the claimed subject matter.

Defendants base an alternative allegation of deceptive intent on even shakier grounds. They accuse Plaintiff Carnegie of filing the reissue application for the RE’189 Patent with deceptive intent because Carnegie supposedly “deliberately omitted material information” about its earlier request to the PTO to establish its inventive contribution to the patent. But that request had been incorporated four years earlier into the prosecution history of the ’610 Patent, the patent from which the RE’189 Patent reissued. Defendants recognize this in their pleading, but still assert it

was deceptively kept from the USPTO. It was unnecessary for Carnegie to resubmit a request that was already of record, and Carnegie acted with no fraudulent intent by relying on this record. Any inference of deceptive intent would not only be unreasonable, it would be fanciful.

The law on this issue taxing: a pleading “must include sufficient allegations of underlying facts from which a court may reasonably infer . . . a specific intent to deceive the PTO,” *Exergen Corp. v. Wal-Mart Stores, Inc.*, 575 F.3d 1312, 1328–29 (Fed. Cir. 2009), and the inference of deceptive intent must “be the single most reasonable inference able to be drawn from the evidence . . . .” *Star Sci., Inc. v. R.J. Reynolds Tobacco Co.*, 537 F.3d 1357, 1366 (Fed. Cir. 2008). The Federal Circuit years ago denounced the common litigation strategy of casting inequitable conduct claims on “the slenderest grounds,” *Therasense, Inc. v. Becton, Dickinson & Co.*, 649 F.3d 1276, 1289 (Fed. Cir. 2011). Yet Defendants attempt just that. Plaintiffs thus request that the Court dismiss with prejudice PGD’s Third Counterclaim and relevant portions of its First Counterclaim under Rule 12(b)(6), and strike with prejudice Defendants’ Fifth and Sixth Affirmative Defenses under Rule 12(f).

## **II. FACTUAL BACKGROUND**

### **A. Pleadings in this Action**

Plaintiffs filed the Complaint in this lawsuit on January 9, 2020 seeking relief from Defendants’ ongoing infringement of the ’078 and RE’189 Patents. Defendants moved to dismiss the Complaint on March 30, 2020, arguing (1) that the asserted claims were invalid for reciting ineligible subject matter and (2) that Plaintiffs failed to adequately plead infringement. ECF Nos. 28, 29. The Court denied the motion on April 28, 2020. ECF No. 43; *see also* ECF No. 46 at 5–12. Defendants filed Defendants’ Answers, Defenses, and Counterclaims on May 8, 2020. ECF No. 47 (“Answer”).

## B. Relevant Prosecution History of the '610 Patent

### 1. The '266 Application for Annealing Processes

The RE'189 Patent reissued from the '610 Patent. Answer, Affirmative Defenses (“Affirmative Defenses”) ¶ 8. That patent was originally filed on June 3, 2002 as the '266 Application by Robert H. Frushour (“Frushour”) and Wei Li (“Li”) (collectively, “the '266 Applicants”). *Id.* ¶ 9. Each assigned their respective interest in the '266 Application to Phoenix Crystal Corporation (“Phoenix”). *Id.* Frushour and Li were listed as joint inventors and submitted oaths stating: “I believe I am . . . an original, first and joint inventor . . . of the subject matter which is claimed and for which a patent is sought . . .” *Id.*; *see also* Ex.<sup>1</sup> 1 at CARN-PGD\_00000949–50.<sup>2</sup> The PTO issued a Notice of Allowance for the '266 Application on April 15, 2004. *Id.* at CARN-PGD\_00000989–91. Subsequently on May 17, 2004, a supplemental information disclosure statement (“IDS”) listing four additional references for the examiner to consider. *Id.* at CARN-PGD\_00000998–1000.

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<sup>1</sup> Citations to “Ex. XXX” refer to the exhibits attached to the Declaration of Matthew J. Moffa concurrently filed herewith.

<sup>2</sup> The Court may consider the prosecution history of the '266, '171, and '529 Applications, and the '610 Patent itself, on this motion to dismiss without converting it into a summary judgement motion. Those documents are integral to Defendants' pleading and matters of public record. *See Sira v. Morton*, 380 F.3d 57, 67 (2d Cir. 2004) (“A complaint is [also] deemed to include any written instrument attached to it as an exhibit, materials incorporated in it by reference, and documents that, although not incorporated by reference, are ‘integral’ to the complaint.” (citations omitted) (quoting *Chambers v. Time Warner, Inc.*, 282 F.3d 147, 153 (2d Cir. 2002)); *Chambers*, 282 F.3d at 153 (document “integral” to complaint where complaint “relie[d] heavily upon its terms and effect” (citation omitted)); *Bentley v. Dennison*, 852 F. Supp. 2d 379, 382 n.5 (S.D.N.Y. 2012) (“Judicial notice of public records is appropriate—and does not convert a motion to dismiss into a motion for summary judgment—because the facts noticed are not subject to reasonable dispute and are capable of being verified by sources whose accuracy cannot be reasonably questioned.”). Although not attached to their pleading, Defendants refer extensively to these file histories, often quoting from them directly. *See, e.g.*, Affirmative Defenses ¶¶ 9–12, 14, 22, 30. “Where plaintiff has actual notice of all the information in the movant’s papers and has relied upon these documents in framing the complaint the necessity of translating a Rule 12(b)(6) motion into one under Rule 56 is largely dissipated.” *Cortec Indus., Inc. v. Sum Holding L.P.*, 949 F.2d 42, 48 (2d Cir. 1991).

## 2. Carnegie's '171 Application and Request for Interference Proceeding

On July 13, 2004, Russell J. Hemley, Ho-kwang Mao, and Chih-shiue Yan (“the '171 Applicants”) filed the '171 Application, which claimed the same subject matter as the '266 Application. Affirmative Defenses ¶ 10; Ex. 2 at 4, 15. The '171 Applicants also included a request for an interference proceeding<sup>3</sup> with the '266 Application, as well as a supporting declaration from the '171 Applicants. Affirmative Defenses ¶ 11; Ex. 2 at 1–4, 19–20. The request stated that “Applicants believe that they are the inventors of the claimed subject matter in [the '266 Application],” and the declaration stated: “We believe that the HPHT annealing processes discussed in [the '266 Application] are processes we directed Dr. Li to carry out because they are similar to the HPHT processes that we asked Dr. Li to perform.” Ex. 2 at 3, 19. They also explained that “Dr. Li never informed us that he filed the ['266 Application] even though we had extensive contact with Dr. Li prior to and after the filing of this U.S. patent application,” and we “have no pertinent knowledge of Robert H. Frushour who is listed as an inventor.” *Id.* at 3.

## 3. The '171 Application and Accompanying Interference Request Recognized in PTO Record for the '266 Application

The patent examiner for the '266 Application initialed the May 17, 2004 supplemental IDS on August 4, 2004, indicating he had considered the disclosed references. Ex. 1 at CARN-PGD\_00001096. The interference request filed by the '171 Applicants and accompanying declaration were made part of the '266 Application’s prosecution record on August 30, 2004. Affirmative Defenses ¶ 11; Ex. 1 at CARN-PGD\_00001097–1101.

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<sup>3</sup> An interference is a proceeding under pre-2011 35 U.S.C. § 135 (which gave the first inventor the rights to a patent) in which the PTO determines which of two competing parties first invented a commonly claimed invention. *See MPEP (2008) § 2301.* Cited portions of the MPEP are attached as Exhibit 5 to the Declaration of Matthew J. Moffa.

On November 2, 2004, the '266 Application issued as the '610 Patent. Affirmative Defenses ¶ 12; Ex. 4. At the time of issuance, the '266 Application was owned by Diamond Innovations, Inc., which had acquired the application through a series of assignments from 2002 to 2003. Affirmative Defenses ¶¶ 16–19.

#### **4. Office Action for the '171 Application Dismissing Interference Request**

On November 22, 2006, the examiner for the '171 Application issued a non-final Office Action rejecting the '171 Application as anticipated by the then-issued '610 Patent. Ex. 2 at 21–25. Although the '171 Applicants' declaration had been filed in support of their interference request, not in support of an Office Action response, the examiner considered whether the declaration was sufficient to overcome the anticipation rejection over the '610 Patent. The examiner concluded it was "insufficient in overcoming this rejection" because "[a] declaration filed under 37 C.F.R. § 1.132 is only applicable if the references do not claim the same patentable invention," and that the '610 Patent "and the present application do claim the same invention." *Id.* at 24. Accordingly, the examiner continued, "the Request for Interference Proceedings is dismissed, as the present application has not been found to be in a condition for allowance." *Id.*

On September 4, 2008, Diamond Innovations, Inc. assigned "its entire right, title and interest in and to" the '610 Patent to Plaintiff Carnegie. Ex. 3 at CARN-PGD\_00000857.

#### **C. Relevant Prosecution History of the RE'189 Patent**

On January 30, 2009, Carnegie filed the '529 Application seeking a correction of inventorship for the '610 Patent.<sup>4</sup> *Id.* at CARN-PGD\_00000854; Affirmative Defenses ¶ 21. The

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<sup>4</sup> A reissue application is filed to correct an error in a patent that renders it wholly or partly inoperative or invalid, including to correct a misjoinder of inventors. See MPEP (2008) §§ 1402, 1412.04 ("The correction of misjoinder of inventors has been held to be a ground for reissue").

reissue application listed Li, Hemley, Mao, and Yan as inventors. Ex. 3 at CARN-PGD\_00000860, 862. Carnegie included a Reissue Application Declaration by the Assignee stating that “Robert H. Frushour is incorrectly named on the 6,811,610 patent as an inventor and Russell J. Hemley, Ho-kwang Mao, and Chih-shiue Yan are incorrectly not named as inventors.” *Id.* at CARN-PGD\_00000861. Under 37 C.F.R. § 1.172(a), “a reissue oath may be made and sworn to or declaration made by the assignee of the entire interest if the application does not seek to enlarge the scope of the claims of the original patent.” 37 C.F.R. § 1.172(a) (2008) (Ex. 6). This was the case for the ’529 Application, as it did not seek to add claims to, nor amend any existing claims of, the ’610 Patent. Additionally, “an assignee of the entire interest can add or delete the name of an inventor by reissue (*e.g.*, correct inventorship from inventor A to inventors A and B) without the original inventor’s consent.” MPEP (2008) § 1412.04.

The PTO issued a Notice of Allowance for the ’529 Application on November 13, 2009 and it issued as the RE’189 Patent on April 6, 2010. Ex. 3 at CARN-PGD\_00000899–906; Affirmative Defenses ¶ 28.

### **III. DEFENDANTS’ INEQUITABLE CONDUCT ALLEGATIONS**

#### **A. Defendants’ Affirmative Defenses Related to Supposed Inequitable Conduct**

In their Defenses and Counterclaims, Defendants assert defenses of inequitable conduct and patent misuse. Affirmative Defenses ¶¶ 8–24. They allege the RE’189 Patent is unenforceable (1) because the ’610 Patent allegedly “was obtained as a result of concealing its true inventorship,” or (2) “because it only issued because of the deliberate omission of material information about a previously failed attempt to institute an interference.” *Id.* ¶ 8. After walking through the prosecution history detailed above, Defendants make allegations based the prosecution events, including:

14. According to the declaration submitted by the '171 Applicants, Li and Frushour **intentionally concealed** the true inventorship of the '266 Application from the USPTO. This information was material to patentability because, but for the concealment of true inventorship, the USPTO would not have issued the '610 Patent in view of 35 U.S.C. § 102(f) (2000). . . .

15. In addition, or in the alternative, the Patent Office reissued the '189 Patent as a result of Carnegie's **deceptive intent** during the reissue process.

. . . .

22. Even though the Patent Office **had denied their claim to inventorship years earlier**, Carnegie alleged that Frushour was incorrectly named as an inventor of the '610 Patent and that Russell J. Hemley, Ho-kwang Mao, and Chih-shiue Yan were incorrectly not named as inventors. This allegation was not accompanied by any signed declaration of Frushour.

23. On information and belief, Carnegie **deliberately omitted material information about Carnegie's denied interference request, including the declaration submitted by the substitute inventors named on the '529 Application**. But for those omissions, the Patent Office would have refused to grant the '529 Application. Because the reissue statute permits only correction of errors made without deceptive intent, Carnegie's deliberate failure to disclose these prior allegations of deceptive intent misled the Patent Office into reissuing the '189 Patent.

*Id.* ¶¶ 14–23 (emphasis added).

Defendants also assert a defense of Invalidity under § 251. Affirmative Defenses ¶¶ 25–32. Although raised under § 251, which gives the circumstances when reissue may be sought, Defendants erroneously made allegations under § 256, which pertains to certificates of correction, not reissue applications:

25. . . . To correct inventorship under 35 U.S.C. § 256 requires that “all parties”—including all inventors being added, removed, or maintained—agree and that inventorship is not contested.

*Id.* ¶ 25.

Defendants also made allegations relating to Carnegie's filing of the '529 Application and supporting Reissue Application Declaration by the Assignee, as well the declaration from the '171 Applicants in support of their request for interference of the '266 Application:

26. Having failed to trigger an interference proceeding more than four years prior, and opting not to change inventorship through a certificate of correction (which would have required Frushour and Li's consent), *Carnegie unilaterally applied for a reissue without submitting any information by or on behalf of the inventors listed on the '610 Patent or the substitute inventors identified in the '529 Application.*

....

30. The declaration accompanying the '171 Application indicated that Li *concealed the existence of the '266 Application from the '171 Applicants* and suggested that Frushour did not contribute to the invention.

....

32. On information and belief, Frushour and Li *purposefully did not name the '171 Applicants as co-inventors of the '266 Application and purposefully named themselves as the sole inventors of the '266 Application.* The '189 Patent therefore reissued contrary to § 251 and is invalid.

*Id.* ¶¶ 25–31 (emphasis added).

## B. PGD's Corresponding Counterclaims

PGD (but not 2AT) brought corresponding counterclaims, namely, PGD's First Counterclaim (Declaratory Judgement of Invalidity) and Third Counterclaim (Inequitable Conduct). In the First Counterclaim, PGD asserts invalidity under, among others, 35 U.S.C. § 251, relying on the factual allegations from the Sixth Affirmative Defense (Invalidity under § 251). Answer, Counterclaims (“Counterclaims”) ¶ 9. PGD made no additional factual allegation with this counterclaim. For its Third Counterclaim, PGD alleges the RE'189 Patent “is unenforceable because the it [sic] is a reissue of a patent that was procured by inequitable conduct or, in the alternative, because the [RE'189 Patent] was itself acquired through inequitable conduct.” *Id.* ¶ 15. PGD relies on the factual allegations from the Fifth Affirmative Defense (Inequitable Conduct and Patent Misuse). *Id.* PGD likewise made no additional factual allegations with this counterclaim.

## IV. LEGAL STANDARD

### A. Motion to Dismiss for Failure to State a Claim under Rule 12(b)(6) and to Strike an Insufficient Defense under Rule 12(f)

“A motion to dismiss a counterclaim is evaluated under the same standard as a motion to dismiss a complaint.” *UPS Store, Inc. v. Hagan*, 99 F. Supp. 3d 426, 434 (S.D.N.Y. 2015) (citation omitted). To survive a motion to dismiss, the pleading must allege “enough facts to state a claim to relief that is plausible on its face.” *Bell Atl. Corp. v. Twombly*, 550 U.S. 544, 570 (2007). If it “pleads facts that are ‘merely consistent with’ a defendant’s liability, it ‘stops short of the line between possibility and plausibility of entitlement to relief.’” *Ashcroft v. Iqbal*, 556 U.S. 662, 678 (2009) (quotation marks omitted) (quoting *Twombly*, 550 U.S. at 557).

Rule 12(f) “provides that a ‘court may strike from a pleading an insufficient defense or any redundant, immaterial, impertinent, or scandalous matter.’” *Burck v. Mars, Inc.*, 571 F. Supp. 2d 446, 456 (S.D.N.Y. 2008) (quoting Fed. R. Civ. P. 12(f)). “Moreover, the standards for a Rule 12(b)(6) motion to dismiss . . . apply to a motion to strike an affirmative defense pursuant to Rule 12(f).” *Cognex Corp. v. Microscan Sys., Inc.*, 990 F. Supp. 2d 408, 418 (S.D.N.Y. 2013) (quoting *Burck*, 571 F. Supp. 2d at 456).

### B. Substantive Legal Standard: Heavy Burden to Show Inequitable Conduct

“Inequitable conduct is an equitable defense to patent infringement that, if proved, bars enforcement of a patent.” *Regeneron Pharm., Inc. v. Merus N.V.*, 864 F.3d 1343, 1350 (Fed. Cir. 2017) (quoting *Therasense*, 649 F.3d at 1285). The consequences are severe: unlike invalidity defenses, which are claim-specific, inequitable conduct renders an entire patent unenforceable, and can even apply to other patents in the same family. *Therasense*, 649 F.3d at 1288 (calling the remedy for inequitable conduct “the ‘atomic bomb’ of patent law.”).

To no surprise, inequitable conduct allegations are often deployed by accused infringers “on the slenderest grounds.” *Id.* at 1289.

The patent challenger’s burden is therefore onerous: “the accused infringer must prove that the applicant misrepresented or omitted [1] material information with [2] the specific intent to deceive the PTO” by clear and convincing evidence. *Id.* at 1287 (citing *Star Sci.*, 537 F.3d at 1365).

To establish deceptive intent based on, as here, an inference of deceptive intent from indirect evidence, the inference must “be the single most reasonable inference able to be drawn from the evidence . . . .” *Star Sci.*, 537 F.3d at 1366; *see also Scanner Techs. Corp. v. ICOS Vision Sys. Corp.*, 528 F.3d 1365, 1376 (Fed. Cir. 2008) (“Whenever evidence proffered to show either materiality or intent is susceptible of multiple reasonable inferences, a district court clearly errs in overlooking one inference in favor of another equally reasonable inference.”). In fact, to defeat these fraud-like allegations, a patentee need not even provide a good faith explanation for the circumstantial facts supposedly establishing deceptive intent. *M. Eagles Tool Warehouse, Inc. v. Fisher Tooling Co.*, 439 F.3d 1335, 1340–41 (Fed. Cir. 2006) (“When the absence of a good faith explanation is the only evidence of intent, however, that evidence alone does not constitute clear and convincing evidence warranting an inference of intent.”). “[W]hen there are multiple reasonable inferences that may be drawn, intent to deceive cannot be found.” *Therasense*, 649 F.3d at 1290–91. Court do not “strike down an entire patent where the patentee only committed minor missteps or acted with minimal culpability or in good faith.” *Star Sci.*, 537 F.3d at 1366.

### C. Pleading Standard: Heightened Rule 9(b) Requirements for Inequitable Conduct

As a claim rooted in fraud, inequitable conduct must be pleaded with particularity under Rule 9(b). *See Exergen*, 575 F.3d at 1328–29. Federal Circuit law governs the heightened standard’s application to allegations of inequitable conduct. *Id.* at 1318. Because of their

slanderous nature, the Federal Circuit requires courts to cast a sharp eye on these claims even at the pleading stage: “A pleading that simply avers the substantive elements of inequitable conduct, without setting forth the particularized factual bases for the allegation” are dismissed. *Id.* at 1326–27. To survive a motion to dismiss, “the specific who, what, when, where, and how of the material misrepresentation or omission committed before the PTO” must be identified in the pleading. *Id.* at 1327.

Allegations of deceptive intent receive heightened scrutiny at the pleading stage given the weighty showing required on the merits (that deceptive intent be the single most reasonable inference). While the knowledge and intent requirements of inequitable conduct may be alleged in general, more is required for deceptive intent: the pleading “must include sufficient allegations of underlying facts from which a court may reasonably infer that a specific individual (1) knew . . . of the falsity of the material misrepresentation, and (2) . . . misrepresented this information with a specific intent to deceive the PTO.” *Id.* at 1328–29. “A reasonable inference is one that is plausible and that flows logically from the facts alleged, including any objective indications of candor and good faith.” *Id.* at 1329 n.5 (citing *Greenstone v. Cambex Corp.*, 975 F.2d 22, 26 (1st Cir. 1992), superseded by statute on other grounds, Private Securities Litigation Reform Act of 1995, Pub. L.No. 104–67, 109 Stat. 737).

## V. PGD FAILED TO PLEAD DECEPTIVE INTENT FOR THE RE’189 PATENT

### A. Factfinders Could Not Reasonably Infer the Original Applicants Acted with Deceptive Intent

Defendant’s inequitable conduct allegations rely on a faulty premise, that the ’266 Applicants (Frushour and Li) “intentionally concealed the true inventorship of the ’266 Application from the USPTO” when they filed their inventor declarations. The pleaded facts,

however, do not lead to a reasonable inference of any “intentional concealment” or, critically, any specific intent to deceive the PTO.

As explained by the Federal Circuit in *Exergen*, Defendants had to “include sufficient allegations of underlying facts from which a court may reasonably infer that” Frushour and Li “misrepresented [the inventorship] information with a specific intent to deceive the PTO.” 575 F.3d 1328–29. Defendants also had to identify “the specific who, what, when, where, and how of the material misrepresentation or omission committed before the PTO.” *Id.* at 1327.

But Defendants allege only that Frushour and Li (1) listed themselves as joint inventors and (2) filed oaths of inventorship stating they were each “an original, first and joint inventor” of the claimed subject matter. Affirmative Defenses ¶ 9.

From these facts, Defendants contrive the inference that Frushour and Li “intentionally concealed the true inventorship of the ’266 Application from the USPTO.” *Id.* ¶¶ 8, 14, 31. But the pleaded facts do not support the inferential leap. Frushour and Li honestly could have believed they were proper inventors. Because Li is still a listed inventor, his belief would have been both justified and correct. While Frushour is no longer a named inventor, there is no reason to believe, and no facts alleged to support, that (1) he did not feel he contributed to the claims as filed, (2) he spuriously held himself out as an inventor; or (3) he tried to hide the true inventorship from the PTO. See *Edge Capture L.L.C. v. Barclays Bank PLC*, No. 09 CV 1521, 2011 WL 13254424, at \*11–12 (N.D. Ill. Aug. 30, 2011) (dismissing counterclaims of inequitable conduct alleging “inventors knowingly filed a false declaration stating that they were the only joint inventors of the subject matter of the patents when they knew they were not” because “the pleadings do not allege any underlying facts from which the Court could reasonably infer that the patent applicants knowingly and intentionally presented falsehoods or omissions to the PTO”). While Carnegie

scientists (the '171 Applicants) were later added as inventors, there is no indication in the pleaded facts or prosecution history that Frushour and Li knew the '171 Applicants were required as inventors or had any intent to conceal Carnegie's contributions. Frushour and Li may honestly have viewed the '266 Application's claims as covering only their contribution and not that of the '171 Applicants. Their oaths stated merely that Frushour and Li were "original, first and joint inventors," not that they were the *only* inventors of covered subject matter. While these facts may be "consistent" with supposed deceptive intent, they stop "short of the line between possibility and plausibility of entitlement to relief." *Iqbal*, 556 U.S. at 678 (quotation marks omitted) (quoting *Twombly*, 550 U.S. at 557). Indeed, if an inference of deceptive intent flowed from these standard inventor oaths, every patent whose inventorship was changed by reissue without the express consent of all the original inventors would be unenforceable. That cannot be correct or the PTO would not permit an assignee to correct inventorship without the consent of the originally named inventors.

An inference of deceptive intent would therefore be unreasonable. While Frushour and Li acted intentionally, intentional acts do not necessarily imply deceptive intent. An applicant can do something deliberately under an honest belief the act is lawful, later acknowledge the act was improper, and correct for it in reissue. *See In re Rosuvastatin Calcium Patent Litig.*, 703 F.3d 511, 522, 523 n.2 (Fed. Cir. 2012) (reissue not improper when patentee, after realizing it failed to disclose relevant prior art references during prosecution, submitted references and narrowed claims during reissue proceeding to avoid references). On the alleged facts, deceptive intent would not be "the single most reasonable inference able to be drawn from the evidence," as required to prevail at trial. *Star Sci.*, 537 F.3d at 1366. "A reasonable inference is one that is plausible and that flows logically from the facts alleged, including any objective indications of candor and good

faith.” *Exergen*, 575 F.3d 1329 n.5. Here, there are numerous objective indications of good faith and candor. For one, Li is currently a named inventor on the patent. Defendants, moreover, allege that Frushour willingly assigned the ’266 Application to Phoenix, Frushour was Phoenix’s CEO, and Phoenix assigned its interest to GE Superabrasives, Inc. This indicates that Frushour willingly relinquished his ownership interest in the ’266 Application, both as an applicant and as CEO of Phoenix, not that he concealed material facts from the PTO to maintain some misappropriated interest.

Oddly, Defendants rely on the ’171 Applicants’ statements to support the purported deceptive intent of Frushour and Li: “According to the declaration submitted by the ’171 Applicants, Li and Frushour intentionally concealed the true inventorship of the ’266 Application from the USPTO.” Affirmative Defenses ¶ 14. But any supposed belief by the ’171 Applicants does not speak to Frushour and Li’s state of mind and, regardless, the declaration made no allegations of “intentional concealment” or deceptive intent. Instead, the ’171 Applicants stated: (1) “Applicants believe that they are the inventors of the claimed subject matter in [the ’266 Application];” (2) “[w]e believe that the HPHT annealing processes discussed in [the ’266 Application] are processes we directed Dr. Li to carry out . . .;” and (3) we “have no pertinent knowledge of Robert H. Frushour who is listed as an inventor.” Ex. 2 at 3, 19.

Defendants also fail to plead “who” committed the supposed inequitable conduct with the specificity required by Rule 9(b) and *Exergen*. See 575 F.3d at 1327. For example, Defendants direct vague accusation to “applicants and their attorneys” without identifying any one individual as culpable: “Deliberate actions taken during prosecution, such as those taken by *the applicants and their attorneys* during prosecution of the ’266 and ’171 Applications, are not errors made without any deceptive intention under § 251.” Affirmative Defenses ¶ 31 (emphasis added); see

*also id.* ¶ 32 (“On information and belief, Frushour and Li purposefully did not name the ’171 Applicants as co-inventors of the ’266 Application and purposefully named themselves as the sole inventors of the ’266 Application.”). Judges in this district have found pleadings like this insufficient. For example, in *Signify North America Corp. v. Reggiani Lighting USA, Inc.*, Reggiani targeted “persons associated with the filing and prosecution of that patent application, including named inventors Ihor A. Lys . . . Frederick M. Morgan . . . and/or prosecution counsel, including Joseph Teja” with inequitable conduct allegations. No. 18 Civ. 11098 (ER), 2020 WL 1331919, at \*6 (S.D.N.Y. Mar. 23, 2020). The court concluded Reggiani “failed to state with specificity an individual (or individuals) ‘who both knew of the material information and deliberately withheld or misrepresented it.’” *Id.* at \*7 (citation omitted). The pleaded facts indicated Morgan and Li, but not necessarily Teja, had the requisite knowledge of materiality, but “Reggiani’s use of the term ‘and/or’ makes it entirely possible that Lys and Morgan . . . might not be the individuals who acted with intent to deceive.” *Id.* at \*6. Defendants likewise falter.

**B. Factfinders Could Not Reasonably Infer that Carnegie Filed the Reissue Application with Deceptive Intent**

Any inference of deceptive intent by Carnegie would be even more unfounded. Defendants allege scant facts to support their misplaced accusation:

15. In addition, or in the alternative, the Patent Office reissued the ’189 Patent as a result of Carnegie’s deceptive intent during the reissue process.

....

21. On January 30, 2009, Carnegie . . . filed [the ’529 Application], seeking reissue of the ’610 Patent. This application later reissued as the ’189 Patent.

22. Even though the Patent Office had denied their claim to inventorship years earlier, Carnegie alleged that Frushour was incorrectly named as an inventor of the ’610 Patent and that Russell J. Hemley, Ho-kwang Mao, and Chih-shiue Yan were incorrectly not named as inventors. This allegation was not accompanied by any signed declaration of Frushour.

23. On information and belief, Carnegie deliberately omitted material information about Carnegie’s denied interference request, including the declaration submitted by the substitute inventors named on the ’529 Application. But for those omissions, the Patent Office would have refused to grant the ’529 Application. Because the reissue statute permits only correction of errors made without deceptive intent, Carnegie’s deliberate failure to disclose these prior allegations of deceptive intent misled the Patent Office into reissuing the ’189 Patent.

Affirmative Defenses ¶¶ 15, 21–23.

But several of these allegations are contradicted by undisputed or indisputable facts. First, the PTO had not “denied [Carnegie’s] claim to inventorship years earlier.” *Id.* ¶ 22. Although the ’171 Applicants requested an interference with the ’266 Application on July 13, 2004, the PTO never reached the inventorship claim. The ’266 Application issued as the ’610 Patent four months after the request (on November 2, 2004), and the PTO did not consider the request until two years later (on November 22, 2006). Before doing so, however, the examiner rejected the ’171 Application as anticipated by the then-issued ’610 Patent. Because of the rejection, and the ’171 Applicants’ declaration’s inapplicability to the rejection, “the Request for Interference Proceedings [was] dismissed, as the present [’171 Application] has not been found to be in a condition for allowance.” Ex. 2 at 24. The inventorship issue persisted.

Second, Carnegie made no “prior allegations of deceptive intent” when it requested the interference or in the supporting declaration. As explained above, the ’171 Applicants never claimed any malice or deceptive intent by Frushour and Li. They only expressed their belief that they directed the processes discussed in the ’266 Application and explained that Li never informed them of the ’266 Application and they had no knowledge of Frushour. *Id.* at 3.

Third, Carnegie did not “deliberately omit[] material information about Carnegie’s denied interference request, including the declaration submitted by the substitute inventors named on the ’529 Application.” As Defendants’ themselves recognize, that interference request and supporting declaration were already in the file history for the ’610 Patent (*i.e.*, the patent for which reissue

was sought). Affirmative Defenses ¶ 11 (“The same request and declaration were made part of the file for the ’266 Application on August 30, 2004.”). There was no need to refile the interference request and declaration—they were already in the relevant record. Defendants’ allegations of “Carnegie’s deceptive intent during the reissue process” (Affirmative Defenses ¶ 15) and “deliberate[ omissions of] material information” are wholly unsubstantiated.<sup>5</sup> Not only would it be unreasonable for a fact finder to draw these inferences, it would be impossible. *See Edge Capture*, 2011 WL 13254424, at \*12 (“Counts V and VI therefore fail to state a claim for inequitable conduct” because “the pleadings do not allege any underlying facts from which the Court could reasonably infer that the patent applicants knowingly and intentionally presented falsehoods or omissions to the PTO.”).

Finally, Defendants insinuate that Carnegie acted improperly by not including “any signed declaration of Frushour” with the ’529 Application, Affirmative Defenses ¶ 22, or when it supposedly “unilaterally applied” for a reissue without “any information by or on behalf of the inventors listed on the ’610 Patent or the substitute inventors identified in the ’529 Application,” *id.* ¶ 26. But a declaration from Frushour was not required. MPEP (2008) §1412.04 (“an assignee of the entire interest can add or delete the name of an inventor by reissue (e.g., correct inventorship from inventor A to inventors A and B) without the original inventor’s consent.”). As an assignee of the entire interest in the patent, moreover, Carnegie was well within its rights to file for reissue

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<sup>5</sup> As certain aspects of an original application’s prosecution (e.g., restriction requirements, *see* MPEP (2008) § 1450) can carry through to reissue examination, the underlying record of the parent application would form part of the documents generally consulted by the examiner in a reissue examination. There is no indication that the reissue examiner here did not review that ’266 Application’s record. To the contrary, the reissue record is replete with indications that the examiner was aware of and considered the content of the ’610 Patent and its underlying ’266 Application. For example, the ’610 Patent and the ’266 Application are referenced numerous times including in the Scientific and Technical Information Center (STIC) search report of June 9, 2009, and in the Examiner’s search history. *See e.g.* Ex. 3 at CARN-PGD\_00000909–932.

and sign the accompanying oath and declaration. 37 C.F.R. § 1.172(a) (2008) (“a reissue oath may be made and sworn to or declaration made by the assignee of the entire interest if the application does not seek to enlarge the scope of the claims of the original patent”).

Defendants’ house of cards therefore collapses. With no plausible allegation of deceptive intent by either the ’266 Applicants, the ’171 Applicants, or Carnegie, the inequitable conduct pleadings are insufficient. “Slender grounds” like this for asserting inequitable conduct were curtailed by the Federal Circuit in 2011. *See Therasense*, 649 F.3d at 1289 (tightening “the standards for finding both intent and materiality in order to redirect a doctrine that has been overused to the detriment of the public inequitable” and noting that “allegations of inequitable conduct are routinely brought on ‘the slenderest grounds’” (quoting *Burlington Indus., Inc. v. Dayco Corp.*, 849 F.2d 1418, 1422 (Fed. Cir. 1988))). Defendants have thus failed to allege the required facts for an essential element of their inequitable conduct claim.

Were this not enough, Defendants again fail to plead “who” committed the supposed inequitable conduct with the requisite specificity. *See Exergen*, 575 F.3d at 1327. They accuse “Carnegie” as a whole of the supposed inequitable conduct. *See, e.g.*, Affirmative Defenses ¶¶ 15, 23. Here too, *Signify* is instructive. 2020 WL 1331919, at \*7. Because “many of Reggiani’s allegations refer[ed] to Signify writ large, rather than to a specific individual, as required by Rule 9(b),” “Reggiani’s references to Signify [were] insufficient to meet the standard for stating an inequitable conduct claim.” *Id.* The same defect pervades here.

## **VI. CONCLUSION**

Plaintiffs respectfully request that the Court grant this motion and dismiss with prejudice PGD’s Third Counterclaim and relevant parts of its First Counterclaim under Rule 12(b)(6), and strike with prejudice Defendants’ Fifth and Sixth Affirmative Defenses under Rule 12(f).

May 29, 2020

Respectfully submitted,

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**CERTIFICATE OF SERVICE**

I hereby certify that on May 29, 2020, I caused to be served copies of the foregoing  
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